

**PR 5** – Posted by Dr. Tarek Hegazy, University of Waterloo, [tarek@uwaterloo.ca](mailto:tarek@uwaterloo.ca)

**Description:** This is a small project with nine activities, as shown in the following table along with two possible estimates for each activity.

Activity	Description	Estimate no. 1 Normal Work		Estimate no. 2 Overtime	
		Dur. (d)	Cost (\$)	Dur. (d)	Cost (\$)
1	<b>A</b>	7	2,000	6	2,300
2	<b>B</b>	5	2,000	3	3,120
3	<b>C</b>	9	2,000	7	2,850
4	<b>D</b>	19	2,000	18	2,200
5	<b>E</b>	10	2,000	9	2,150
6	<b>F</b>	8	2,000	6	2,500
7	<b>G</b>	5	2,000	---	---
8	<b>H</b>	11	2,000	10	2,550
9	<b>I</b>	7	2,000	6	2,200

**Logical Relationships:**

Activity B follows A;  
 Activities C, D, and E follow activity B;  
 G depends on the completion of F;  
 F succeeds C;  
 Activity H follows E; and  
 Activity I starts after the completion of activities D, G, and H.

**Project Constraints:**

- Deadline is 40 days. No Penalty for late completion but early completion bonus is \$500/day.
- Reporting period is 5 days; interest=1%; Markup=5%; and Hold Back=10%.
- No mobilization payment or credit for suppliers is involved;
- Assume no indirect cost.

**Requirements:**

Enter project data into EasyPlan, print the network, and determine the least costly schedule considering the bonus value given. **Check your solution.**

Print the Cash flow and notice the interest charges. View and print the final bid proposal form.